

ABSTRACT

Provision of a differential drive circuit for low voltage differential signals is made in which the circuit area and current consumption are reduced and the problem of oscillation caused by noise is solved by eliminating differential amplifiers or reducing the number of differential amplifiers and a high drive capability is provided, and an electronic apparatus incorporating such a circuit.

The circuit includes: a switching circuit constituted by MOS transistors, to which differential signals are inputted and which outputs current signals; an output circuit constituted by an NMOS transistor connected at its one end to a power supply potential on the high potential side and at its other end to one node in the switching circuit and operating as a source follower, and a PMOS transistor connected at its one end to a power supply potential on the low potential side and at its other end to other node in the switching circuit and operating as a source follower; and a reference potential generating circuit that supplies reference potentials to gates of the PMOS transistor and the NMOS transistor, respectively, wherein the reference potential generating circuit includes potential variable means for changing a differential potential with an offset potential being constant. The circuit further includes an emphasis circuit for the output

circuit.